

PATENT

Practitioner's Docket No. 4960 (CIP)

Box Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

16800 U.S. PTO
10/664286
09/17/03


NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of Inventor(s):

**Wolfgang F. Ruettinger, East Windsor, New Jersey
Oleg M. Ilinich, Monmouth Junction, New Jersey
Robert J. Farrauto, Princeton, New Jersey**

For (Title): **OPERATING CONDITIONS FOR COPPER-BASED
WATER-GAS SHIFT CATALYSTS**

1. Type of Application

This new application is for a(n)

- Original (non-provisional)
- Design
- Divisional
- Continuation
- Continuation-in-part (CIP)

2. Benefit of Prior U.S. Application(s) (35 U.S.C. 119(e), 120, or 121)

- The new application being transmitted claims the benefit of prior U.S. application(s). Enclosed are ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

Certification under 37 CFR 1.10

I hereby certify that this New Application Transmittal and the documents referred to as attached therein are being deposited with the United States Postal Service in an envelope as "Express Mail Post Office to Addressee", mailing Label No. **EV 328144878 US**, addressed to: Box Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

DATED: September 17, 2003


Signature of person mailing paper

**3. Papers Enclosed which are required for filing date under 37 C.F.R. § 1.53(b)
(Regular) or 37 C.F.R. § 1.153 (Design) Application.**

18 Pages of specification

3 Pages of claims

1 Pages of Abstract

4 Sheets of Drawing

- Formal
- Informal
- The enclosed drawing(s) are photograph(s), and
there is also attached a "PETITION TO ACCEPT
PHOTOGRAPH(S) AS DRAWING(S)". 37 CFR 1.84(b).

4. Additional papers enclosed:

- Preliminary Amendment
- Information Disclosure Statement (37 CFR 1.98)
- Form PTO-1449 (PTO/SB/08A and 08B)
- Citations
- Other

5. Declaration or oath

- Enclosed
- Executed by

(check all applicable boxes)

- inventor(s).
- legal representative of inventor(s).
37 CFR 1.42 or 1.43.
- joint inventor or person showing a proprietary
interest on behalf of inventor who refused to sign
or cannot be reached.
 - This is the petition required by 37 CFR 1.47 and the statement
required by 37 CFR 1.47 is also attached. See item 13 below for fee.
- Not enclosed.

6. Inventorship Statement

The inventorship for all the claims in this application are:

- The same.
 - or
- Not the Same. An explanation, including the ownership
of the various claims at the time the last claimed invention was made,
 - is submitted.
 - will be submitted.

7. Language

- English
- Non-English
 - The attached translation includes a statement that the translation is accurate. 37 C.F.R. 1.52(d).

8. Assignment

- an assignment of the invention to ENGELHARD CORPORATION
- is attached. A Separate "COVER SHEET FOR ASSIGNMENT (DOCUMENT) ACCOMPANYING NEW PATENT APPLICATION" or FORM PTO 1595 is also attached.
- will follow.

NOTE: *"If an assignment is submitted with a new application, send two separate letters-one for the application and one for the assignment." Notice of May 4, 1990 (1114 O.G. 77-78).*

WARNING: *A newly executed "CERTIFICATE UNDER 37 CFR 3.73(b)" must be filed when a continuation-in-part application is filed by an assignee. Notice of April 30, 1993, 1150 O.G. 62-64.*

9. Certified Copy

Certified Copy(ies) of application(s)

| Country | Appln. No. | Filed |
|---------|------------|-------|
|---------|------------|-------|

| | | |
|---------|------------|-------|
| Country | Appln. No. | Filed |
|---------|------------|-------|

| | | |
|---------|------------|-------|
| Country | Appln. No. | Filed |
|---------|------------|-------|

from which priority is claimed

- is (are) attached.
- will follow.

NOTE: *The foreign application forming the basis for the claim for priority must be referred to in the oath or declaration. 37 CFR 1.55(a) and 1.63.*

NOTE: *This item is for any foreign priority for which the application being filed directly relates. If any parent U.S. application or International Application from which this application claims benefit under 35 U.S.C. 120 is itself entitled to priority from a prior foreign application, then complete item 18 on the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.*

10. Fee Calculation (37 CFR 1.16)**A. ■ Regular application****CLAIMS AS FILED**

| Number filed | Number Extra | Rate | Basic Fee |
|---|------------------|---------------|-----------|
| 37 CFR 1.16(a) \$ 740.00 | | | |
| Total Claims (37 CFR 1.16(c)) | 13 -20 = 0 | X \$18.00 | \$ -0- |
| Independent Claims (37 CFR 1.16(b)) | 4 - 3 = 1 | X \$84.00 | \$ 84.00 |
| Multiple dependent claim(s), If any (37 CFR 1.16(d)) | | X \$280.00 | -0- |

- Amendment canceling extra claims is enclosed.
 Amendment deleting multiple-dependencies is enclosed.
 Fee for extra claims is not being paid at this time.

NOTE: *If the fees for extra claims are not paid on filing, they must be paid or the claims cancelled by amendment, prior to the expiration of the time period set for response by the Patent and Trademark Office in any notice of fee deficiency. 37 CFR 1.16(d).*

Filing Fee Calculation **\$ 834.00**

B. Design application
(\$330.00 – 37 CFR 1.16(f))

Filing Fee Calculation **\$ _____**

11. Small Entity Statement(s)

- Statement(s) that this is a filing by a small entity under 37 CFR 1.9 and 1.27 is (are) attached.

(complete the following, if applicable)

- Status as a small entity was claimed in prior application

_____ / _____, filed on _____, from which benefit
is being claimed for this application under:

- 35 U.S.C. 119(e),
 120,
 121,
 365(c),

and which status as a small entity is still proper and desired.

- A copy of the statement in the prior application is included.
Filing Fee Calculation (50% of A, B or C above)

\$ 834.00

12. Request for International-Type Search (37 C.F.R. 1.104(d))

- Please prepare an international-type search report for this application at the time when national examination on the merits takes place.

13. Fee Payment Being Made at This Time

- Not Enclosed
 No filing fee is to be paid at this time.
(This and the surcharge required by 37 C.F.R. 1.16(e) can be paid subsequently).

Enclosed

Filing Fee \$ 834.00

Recording assignment (\$40.00; 37 C.F.R. 1.21(h))
(See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION"). \$ _____

Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached. (\$130.00; 37 C.F.R. 1.47 and 1.17(i)) \$ _____

For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. 1.52(d) and 1.17(k)) \$ _____

Processing and retention fee (\$130.00; 37 C.F.R. 1.53(d) and 1.21(l)) \$ _____

Fee for international-type search report (\$40.00; 37 C.F.R. 1.21(e)) \$ _____

Total fees enclosed \$ 834.00

14. Method of Payment of Fees

Charge Account No. 05-1070 in the amount of \$ 834.00
A duplicate of this transmittal is attached.

15. Commissioner is hereby authorized to charge any additional fees required by this paper and during the entire pendency of this application to Account No. 05-1070.

16. Credit any overpayment to Account No. 05-1070.

Reg. No. 39,750

Tel. No. (732) 205-7125

Engelhard Corporation
101 Wood Avenue
P.O. Box 770
Iselin, New Jersey 08830



Signature of Practitioner

Russell G. Lindenfelder
(type or print name of attorney)

Date: September 17, 2003

Incorporation by reference of added pages

(check the following item if the application in this transmittal claims the benefit of prior U.S. application(s) (including an international application entering the U.S. stage as a continuation, divisional or C-I-P application) and complete and attach the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED)

Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed

Number of pages added 8

Plus Added Pages for Papers Referred to in item 4 above

Number of pages added _____

Plus added pages deleting names of inventor(s) named in prior application(s) who is/are no longer Inventor(s) of the subject matter claimed in this application.

Number of pages added _____

Plus "Assignment Cover Letter Accompanying New Application"

Number of pages added _____

Statement Where No Further Pages Added

(if no further pages from a part of this Transmittal, then end this Transmittal with this page and check the following item)

This transmittal ends with this page.

**ADDED PAGES FOR APPLICATION TRANSMITTAL WHERE BENEFIT OF
PRIOR U.S. APPLICATION(S) CLAIMED
(37 C.F.R. § 1.78)**

17. Relate Back

WARNING: *If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. § 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. § 120, 121 or 365(c). (35 U.S.C. § 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. § 119, 365(a) or 365(b).) For a c-l-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60 Fed. Reg. 20,195, at 20,205.*

(complete the following, if applicable)

- Amend the specification by inserting, before the first line following the title, the following sentence:

A. 35 U.S.C. § 119(e)

NOTE: 37 C.F.R. § 1.78(a)(4) and (5):

"(4) A nonprovisional application, other than for a design patent, or an international application designating the United States of America may claim an invention disclosed in one or more prior-filed provisional applications. In order for an application to claim the benefit of one or more prior-filed provisional applications, each prior-filed provisional application must name as an inventor at least one inventor named in the later-filed application and disclose the named inventor's invention claimed in at least one claim of the later-filed application in the manner provided by the first paragraph of 35 U.S.C. 112. In addition, each prior-filed provisional application must be entitled to a filing date as set forth in § 1.53(c), and the basic filing fee set forth in § 1.16(k) must be paid within the time period set forth in § 1.53(g).

"(5)(i) Any nonprovisional application or international application designating the United States of America claiming the benefit of one or more prior-filed provisional applications must contain or be amended to contain a reference to each such prior-filed provisional application, identifying it by the provisional application number (consisting of series code and serial number).

"(ii) This reference must be submitted during the pendency of the later-filed application. If the later-filed application is an application filed under 35 U.S.C. 111(a), this reference must also be submitted within the later of four months from the actual filing date of the later-filed application or sixteen months from the filing date of the prior-filed provisional application. If the later-filed application is a nonprovisional application which entered the national stage from an international application after compliance with 35 U.S.C. 371, this reference must also be submitted within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) in the later-filed international application or sixteen months from the filing date of the prior-filed provisional application. These time periods are not extendable. Except as provided in paragraph (a)(6) of this section, the failure to timely submit the reference is considered a waiver of any benefit under 35 U.S.C. 119(e) to such prior-filed provisional application. The time periods in this paragraph do not apply if the later-filed application is:

"(A) An application filed under 35 U.S.C. 111(a) before November 29, 2000; or

"(B) A nonprovisional application which entered the national stage after compliance with 35 U.S.C. 371 from an international application filed under 35 U.S.C. 363 before November 29, 2000.

"(iii) If the later-filed application is a nonprovisional application, the reference required by this paragraph must be included in an application data sheet (§ 1.76), or the specification must contain or be amended to contain such reference in the first sentence following the title."

"This application claims the benefit of U.S. Provisional Application(s) No(s).:

APPLICATION NO(S).: FILING DATE

_____/_____,"

_____/_____,"

_____/_____,"

WARNING: 37 C.F.R. § 1.78(5)(iv): "(iv) If the prior-filed provisional application was filed in a language other than English and an English-language translation of the prior-filed provisional application and a statement that the translation is accurate were not previously filed in the prior-filed provisional application or the later-filed nonprovisional application, applicant will be notified and given a period of time within which to file an English-language translation of the non-English-language prior-filed provisional application and a statement that the translation is accurate. In a pending nonprovisional application, failure to timely reply to such a notice will result in abandonment of the application."

Language of Prior Filed Provisional Application

(Supply information for each provisional whose benefit is being claimed)

The above identified prior filed provisional application whose benefit is being claimed

- was filed in the English language
- was filed in a language other than English and an English translation along with a statement that the translation is accurate was filed in the provisional application
- was filed in a language other than English and an English translation along with a statement that the translation is accurate is filed herewith

B. 35 U.S.C. Sections 120, 121 and 365(c)

WARNING: The applicable provisions for the time and manner of claiming the benefit of a prior U.S. application filing date are set forth in 37 C.F.R. § 1.78(a)(1) and (2) as follows:

"(a)(1) A nonprovisional application or international application designating the United States of America may claim an invention disclosed in one or more prior-filed copending nonprovisional applications or international applications designating the United States of America. In order for an application to claim the benefit of a prior-filed copending nonprovisional application or international application designating the United States of America, each prior-filed application must name as an inventor at least one inventor named in the later-filed application and disclose the named inventor's invention claimed in at least one claim of the later-filed application in the manner provided by the first paragraph of 35 U.S.C. 112. In addition, each prior-filed application must be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designating the United States of America; or
- (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time period set forth in § 1.53(f).

(Added Pages for Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed [4-1.4]
—page 2 of 8)

(2)(i) Except for a continued prosecution application filed under § 1.53(d), any nonprovisional application or international application designating the United States of America claiming the benefit of one or more prior-filed copending nonprovisional applications or international applications designating the United States of America must contain or be amended to contain a reference to each such prior-filed application, identifying it by application number (consisting of the series code and serial number) or international application number and international filing date and indicating the relationship of the applications. Cross references to other related applications may be made when appropriate (see § 1.14).

(ii) This reference must be submitted during the pendency of the later-filed application. If the later-filed application is an application filed under 35 U.S.C. 111(a), this reference must also be submitted within the later of four months from the actual filing date of the later-filed application or sixteen months from the filing date of the prior-filed application. If the later-filed application is a nonprovisional application which entered the national stage from an international application after compliance with 35 U.S.C. 371, this reference must also be submitted within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) in the later-filed international application or sixteen months from the filing date of the prior-filed application. These time periods are not extendable. Except as provided in paragraph (a)(3) of this section, the failure to timely submit the reference required by 35 U.S.C. 120 and paragraph (a)(2)(i) of this section is considered a waiver of any benefit under 35 U.S.C. 120, 121, or 365(c) to such prior-filed application. The time periods in this paragraph do not apply if the later-filed application is:

- (A) An application for a design patent;
- (B) An application filed under 35 U.S.C. 111(a) before November 29, 2000; or
- (C) A nonprovisional application which entered the national stage after compliance with 35 U.S.C. 371 from an international application filed under 35 U.S.C. 363 before November 29, 2000.

(iii) If the later-filed application is a nonprovisional application, the reference required by this paragraph must be included in an application data sheet (§ 1.76), or the specification must contain or be amended to contain such reference in the first sentence following the title.

(iv) The request for a continued prosecution application under § 1.53(d) is the specific reference required by 35 U.S.C. 120 to the prior-filed application. The identification of an application by application number under this section is the identification of every application assigned that application number necessary for a specific reference required by 35 U.S.C. 120 to every such application assigned that application number."

"This application is a

- continuation
- continuation-in-part
- divisional

of copending application(s)

application number ~~xx~~ 10/281,635 filed on 10/28/02 "

International Application _____ filed on _____ and which designated the U.S."

NOTE: The proper reference to a prior filed PCT application that entered the U.S. national phase is the U.S. serial number and the filing date of the PCT application that designated the U.S.

NOTE: (1) Where the application being transmitted adds subject matter to the International Application, then the filing can be as a continuation-in-part or (2) if it is desired to do so for other reasons then the filing can be as a continuation.

(Added Pages for Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed [4-1.4]
—page 3 of 8)

- "The nonprovisional application designated above, namely application _____/_____, filed _____, claims the benefit of U.S. Provisional Application(s) No(s).:

| APPLICATION NO(S).: | FILING DATE |
|---------------------|-------------|
|---------------------|-------------|

| | |
|---------------|---|
| _____ / _____ | " |
| _____ / _____ | " |
| _____ / _____ | " |

C. Language of Publication of International Application

- Please indicate in the first sentence of the application:
"The international application corresponding to the instant application

- was
 was not

published under PCT Article 21(2) in the English language."

- Where more than one reference is made above please combine all references into one sentence.

18. Relate Back—35 U.S.C. § 119 Priority Claim for Prior Application

NOTE: 37 C.F.R. § 1.55 Claim for foreign priority.

"(a) An applicant in a nonprovisional application may claim the benefit of the filing date of one or more prior foreign applications under the conditions specified in 35 U.S.C. 119(a) through (d) and (f), 172, and 365(a) and (b).

(1)(i) In an original application filed under 35 U.S.C. 111(a), the claim for priority must be presented during the pendency of the application, and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior foreign application. This time period is not extendable. The claim must identify the foreign application for which priority is claimed, as well as any foreign application for the same subject matter and having a filing date before that of the application for which priority is claimed, by specifying the application number, country (or intellectual property authority), day, month, and year of its filing. The time period in this paragraph does not apply to an application for a design patent.

(ii) In an application that entered the national stage from an international application after compliance with 35 U.S.C. 371, the claim for priority must be made during the pendency of the application and within the time limit set forth in the PCT and the Regulations under the PCT."

(2) The claim for priority and the certified copy of the foreign application specified in 35 U.S.C. 119(b) or PCT Rule 17 must, in any event, be filed before the patent is granted. If the claim for priority or the certified copy of the foreign application is filed after the date the issue fee is paid, it must be accompanied by the processing fee set forth in § 1.17(i), but the patent will not include the priority claim unless corrected by a certificate of correction under 35 U.S.C. 255 and § 1.323.

(Added Pages for Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed [4-1.4]
—page 4 of 8)

The prior U.S. application(s), including any prior International Application designating the U.S., identified above in item 17B, in turn itself claim(s) foreign priority(ies) as follows:

| Country | Appln. No. | Filed |
|------------------------------------|------------|-------|
| The certified copy(ies) has (have) | | |

- been filed on _____, in prior application O / _____, which was filed on _____
- is (are) attached.

WARNING: *The certified copy of the priority application that may have been communicated to the PTO by the International Bureau may not be relied on without any need to file a certified copy of the priority application in the continuing application. This is so because the certified copy of the priority application communicated by the International Bureau is placed in a folder and is not assigned a U.S. serial number unless the national stage is entered. Such folders are disposed of if the national stage is not entered. Therefore, such certified copies may not be available if needed later in the prosecution of a continuing application. An alternative would be to physically remove the priority documents from the folders and transfer them to the continuing application. The resources required to request transfer, retrieve the folders, make suitable record notations, transfer the certified copies, enter and make a record of such copies in the Continuing Application are substantial. Accordingly, the priority documents in folders of international applications that have not entered the national stage may not be relied on. Notice of April 28, 1987 (1079 O.G. 32 to 46).*

19. Maintenance of Copendency of Prior Application

NOTE: *The PTO finds it useful if a copy of the petition filed in the prior application extending the term for response is filed with the papers constituting the filing of the continuation application. Notice of November 5, 1985 (1060 O.G. 27).*

A. Extension of time in prior application

(This item must be completed and the papers filed in the prior application, if the period set in the prior application has run.)

- A petition, fee and response extends the term in the pending prior application until _____
- A copy of the petition filed in prior application is attached.

B. Conditional Petition for Extension of Time in Prior Application

(complete this item, if previous item not applicable)

- A conditional petition for extension of time is being filed in the pending prior application.
- A copy of the conditional petition filed in the prior application is attached.

20. Further Inventorship Statement Where Benefit of Prior Application(s) Claimed

(complete applicable item (a), (b) and/or (c) below)

- (a) This application discloses and claims only subject matter disclosed in the prior application whose particulars are set out above and the inventor(s) in this application are
- the same.
 - less than those named in the prior application. It is requested that the following inventor(s) identified for the prior application be deleted:

(type name(s) of inventor(s) to be deleted)

- (b) This application discloses and claims additional disclosure by amendment and a new declaration or oath is being filed. With respect to the prior application, the inventor(s) in this application are
- the same.
 - the following additional inventor(s) have been added:

(type name(s) of inventor(s) to be deleted)

- (c) The inventorship for all the claims in this application are
- the same.
 - not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made
 - is submitted.
 - will be submitted.

21. Abandonment of Prior Application (if applicable)

- Please abandon the prior application at a time while the prior application is pending, or when the petition for extension of time or to revive in that application is granted, and when this application is granted a filing date, so as to make this application copending with said prior application.

NOTE: According to the Notice of May 13, 1983 (103, TMOG 6-7), the filing of a continuation or continuation-in-part application is a proper response with respect to a petition for extension of time or a petition to revive and should include the express abandonment of the prior application conditioned upon the granting of the petition and the granting of a filing date to the continuing application.

22. Petition for Suspension of Prosecution for the Time Necessary to File an Amendment

WARNING: "The claims of a new application may be finally rejected in the first Office action in those situations where (A) the new application is a continuing application of, or a substitute for, an earlier application, and (B) all the claims of the new application (1) are drawn to the same invention claimed in the earlier application, and (2) would have been properly finally rejected on the grounds of art of record in the next Office action if they had been entered in the earlier application." M.P.E.P. § 706.07(b), 7th ed.

NOTE: Where it is possible that the claims on file will give rise to a first action final for this continuation application and for some reason an amendment cannot be filed promptly (e.g., experimental data is being gathered), it may be desirable to file a petition for suspension of prosecution for the time necessary.

(check the next item, if applicable)

- There is provided herewith a Petition To Suspend Prosecution for the Time Necessary to File An Amendment (New Application Filed Concurrently)

23. Small Entity (37 C.F.R. § 1.28(a))

- Applicant has established small entity status by the filing of a statement in parent application _____/_____ on _____
- A copy of the statement previously filed is included.

WARNING: See 37 C.F.R. § 1.28(a).

WARNING: "Small entity status must not be established when the person or persons signing the . . . statement can unequivocally make the required self-certification." M.P.E.P. § 509.03, 7th ed. (emphasis added).

24. NOTIFICATION IN PARENT APPLICATION OF THIS FILING

- A notification of the filing of this

(check one of the following)

- continuation
- continuation-in-part
- divisional

is being filed in the parent application, from which this application claims priority under 35 U.S.C. § 120.

4960 (CIP)

**ADDED PAGE(S) FOR APPLICATION TRANSMITTAL WHERE BENEFIT OF
A PRIOR U.S. APPLICATION CLAIMED**

Added page _____

(Added Pages for Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed [4-1.4]
—page 8 of 8)